



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,276	11/25/2003	Constantin Donea	143572-1	8751
23413	7590	11/15/2006	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			LONEY, DONALD J	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/723,276

Applicant(s)

DONEA ET AL.

Examiner

Donald Loney

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-28 is/are pending in the application.
- 4a) Of the above claim(s) 13-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received:

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 7, 2006 has been entered.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 7, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by either Davis (4788777) or Erb (4114597).

Both references disclose a multiwalled sheet comprising ribs connecting a first and second sheet. Refer to figure 2 in Davis. Refer to figure 5 and 8 in Erb showing sheets 70 and 72 connected with ribs 84 and sheets 166 and 168 connected with ribs 172 respectively. The examiner notes the applicant does not exclude the other sheets and ribs, above the sections referred to by the examiner, in Erb due to the open claim language drawn to "comprising". Both references disclose the addition of carbon black to the polymer. See column 3, lines 4-6 in Davis and column 6, lines 51-55 in Erb. Since

Art Unit: 1772

this is the same material disclosed for the electrically conductive filler of instant claim 7, the examiner deems the filler (i.e. electrically conductive) to be inherently the same as the recited invention since they are the same materials. With regards to the specific materials in claim 1, see the Abstract in Davis and column 6, lines 51-55 and column 12, lines 14-44 in Erb. With regards to claim 2, see the Abstract of Davis disclosing a mixture of polycarbonate and polysulfone. With regards to claim 11, Davis discloses glass fibers in the mixture which can be considered an impact modifier (see Abstract) and Erb discloses reinforcement modifiers/fillers at column 12, lines 43 and 44. With regards to claim 12, the structure of the prior art is an extruded one piece panel which would not structurally distinguish from the process limitation of fused ribs to the sheets.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeHeras et al (4773534) in view of Schmitz et al (5360658) and Ho et al (5658644).

DeHeras discloses a multiwall sheet comprising a first sheet 32 or 35 and second sheet 34 or 36 which are connected by ribs 33. The sheet is disclosed as being made of an electrically conductive plastic. Refer to figures 5-7 along with column 2, line

Art Unit: 1772

24-64. DeHeras et al does fail to disclose that electrically conductive filler is used to impart said conductivity.

Schmitz et al discloses to include carbon black (one of applicants' fillers in claim 7) in a polymer resin in order to provide conductivity thereto. Refer to the Abstract along with column 1, lines 17-22, 40-42 and column 2, lines 58-65.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to DeHeras et al to include carbon black (or any other conductive filler) in the resin, as taught by Schmitz et al, in order to impart conductivity thereto motivated by the fact DeHeras et al teaches the resin as conductive. The specific polymers per claims 1-3, 5 and 6 are obvious to one of ordinary skill motivated by the fact DeHeras et al teaches to use polymer resins and substituting one polymer for another would be obvious to a skilled artisan. Ho et al is cited in order to show motivation to substitute polycarbonate for the polypropylene of DeHeras since Ho et al discloses that multiwalled sheets can be formed of either materials (see column 3, lines 6-15). The examiner believes one would also be motivated to substitute polymers since both DeHeras and Schmitz are both drawn to packaging materials for electronic components (see column 1, lines 19-22 in Schmitz et al and column 1, lines 5-32). The properties of claims 9 and 10 would be obvious to one of ordinary skill in the art motivated by the fact one would include the required amount of conductive filler to impart said properties in order to conform the product to its desired application. The additives per claim 11 would be obvious as a known means to provide a particular function thereto.

Art Unit: 1772

6. Claims 1-3 and 5-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dobler (6680350) in view of Schmitz et al and Jaatinen et al (6649677) or WO 02/36899.

Dobler et al teaches a molding composition for forming glazings therefrom that contains a variety of resins recited by the applicant in claims 1-3, 5 and 6. Refer to column 4, lines 38-49. The composition can be used to form twin or multi wall sheets (i.e. two sheets interconnected with ribs as applicant recites in claim 1 and shows in figures 1 and 2). Refer to column 10, lines 9-20. It can also contain antioxidants per claim 11. Dobler et al does fail to specifically disclose an electrically conductive filler included in the resin. Dobler et al does disclose generally that it is known to include fillers in the resin (column 8, lines 29-45).

Schmitz et al discloses to include carbon black (one of applicants' fillers in claim 7) in a polymer resin in order to provide conductivity thereto. Refer to the Abstract along with column 1, lines 17-22, 40-42 and column 2, lines 58-65.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to Dobler et al to include carbon black (or any other conductive filler) in the resin, as taught by Schmitz et al, in order to impart conductivity thereto motivated by the fact Dobler et al teaches that fillers can be included in the resin. The properties of claims 9 and 10 would be obvious to one of ordinary skill in the art motivated by the fact one would include the required amount of conductive filler to impart said properties in order to conform the product to its desired application. The additives per claim 11 would be obvious as a known means to provide a particular

Art Unit: 1772

function thereto. With respect to the sheets with ribs limitation of claim 1, multiwalled sheets, in the form of glazings, are typically formed of two sheets with ribs therebetween, therefore, it is the examiners position that this is inherently taught by Dobler et al. The references to Jaatinen et al (6649677) and WO 02/36899 are cited as teaching references to the fact. Refer to column 4, lines 62-67 in Jaatinen et al and figures 1-3 in WO 02/36899.

### ***Response to Arguments***

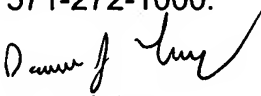
7. Applicant's arguments with respect to claims 1-3 and 5-12 have been considered but are moot in view of the new ground(s) of rejection. With regards to the applicant's argument's that there would be no motivation to combine either DeHeras in view of Schmitz et al or Dobler et al in view of Schmitz et al, as previously done, the examiner has included additional references in the rejections above which address these arguments and provide proper motivation to combine the references and show the structure as recited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Loney whose telephone number is (571) 272-1493. The examiner can normally be reached on Mon, Tues, Thurs and Fri. 8AM-4PM, flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1772

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Donald Loney  
Primary Examiner  
Art Unit 1772

DJL:D.Loney  
11/12/03